





# Signature 12.2

## Pro-Ject's high-end flagship turntable

MSRP without cartridge 12.000 € (incl. VAT)

- NEW 3-point pivot tonearm bearing construction
- NEW modified counterweight system
- NEW motors mounted in full aluminium motor block for even more effective vibration damping
- NEW round shaped MDF chassis
- NEW spring loaded feet with conical tip adjustable from the top of the turntable chassis
- · Heavyweight mass-loaded design
- Magnetically decoupled main platter
- Resonance-optimised alloy
- Inverted main bearing with ceramic ball
- Flywheel belt drive
- High gloss hand-polished aluminium surfaces
- Handmade in Europe

colour options:

control panel



**Speed:** 33, 45 electronic speed change

**Speed variance:** 33: ±0.09% 45: ±0.08% **Wow and flutter:** 33: ±0.01% 45: ±0.01%

Signal to noise: -75dB

Effective tonearm mass/length: 21.7g/ 12" (304.8mm)

Overhang: 13.2mm

Actuation principle: Flywheel belt drive

Motor control system: Precision generator

Platter: 10,55 kg magnetically decoupled

Main bearing: ceramic (ball/plate)

**Tonearm:** 12" aluminium - 3-point pivot **Dimensions:** 580x 220 x 480mm (WxHxD) **Power consumption:** 15W/0.5W standby

Power input: 15V/ 1.6 A DC, universal power supply

Weight/incl. packaging: 37 kg/60 kg



## **Pro-Ject's Flagship Signature**

After showing off various early **design-concepts** of this turntable at audio shows worldwide over the past couple of years, we're more than excited to officially introduce our new flagship turntable, the **Signature 12.2**.

Pro-Ject Audio Systems is not typically associated with the **ultimate of high-end turntables**. But our goal has always been to make **high-end technology more affordable**. To **really understand what high-end means**, we've always been **working on different high-end turntable technologies** to **improve our reference-designs** so we can create spin-offs for more **affordable record players**.

That's why we created the **Signature** line! We're thrilled to offer these turntables at an **extremely attractive price**, as the **development cost is not counted**, as we anyway had to do the **research to move forward with Pro-Ject technology** in general. The new **Signature 12.2** is now even **more impressive** than its predecessor!

## The ultimate in craftsmanship

The Signature 12.2 represents highest level of turntable technology with **exclusive materials** and **luxury finish**. The turntable is **handmade** only by our **best trained people!** All metal parts are **hand polished** and there are about **100 different CNC parts** used - **all made in house**.

Note, it takes about 2 days to hand-polish and precision-mount all the components, and all components are manufactured in-house.

The heavy MDF main chassis is hand-painted in 10 layers and carefully hand-polished to achieve the classic, timeless and luxurious piano-black finish. The main chassis is bigger and more massive than before, plus the new rounded edges reduce standing waves. With precision CNC machining we avoid hollow spaces wherever possible avoiding any unwanted resonances.





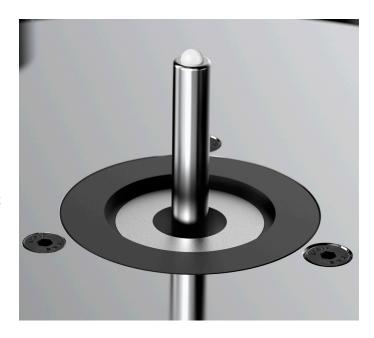
## **Bearing and Platter**

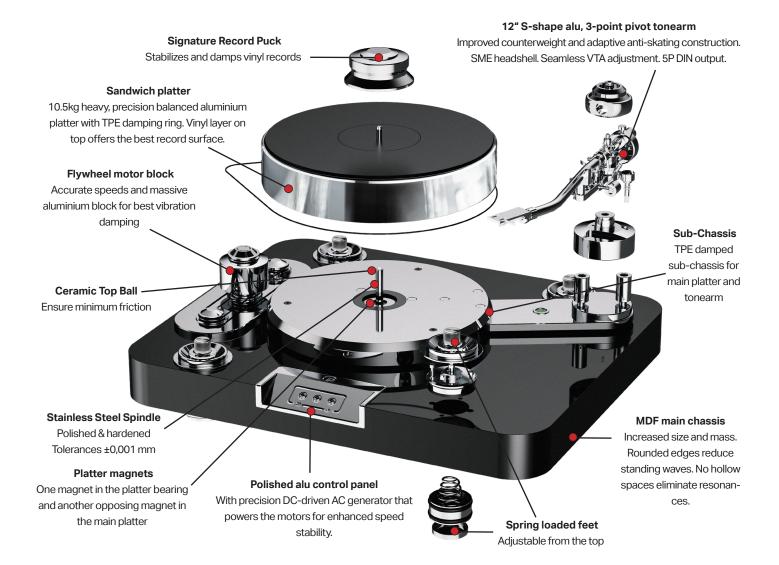
To ensure stable speeds a proper platter bearing is needed. The Signature 12.2 uses a **special technology**.

The heavyweight platter spins on an inverted ceramic ball bearing with a magnetic support to reduce bearing noise and resonance to an absolute minimum.

The main platter is **precision CNC-machined** from aluminum and weighs a **substantioal 10.5kg**. Taking this base, we've glued **recycled Vinyl** records to the top (which act as a **perfect mat**) and **bake this 'sandwich'** before **precision balancing** it.

With this solution the final product benefits from a wonderfully resonance-free, heavy platter and with the magnetic decoupling we are able to relieve the main bearing and ensure that the platter runs ultra-silently.









## **Tonearm Design**

The new 12" S-shape aluminium tonearm has received several new innovations. Two of the more subtle changes include improvements to the counterweight and the anti-skating. The counterweight now features a fine thread for smoother tracking force adjustment, allowing for smaller, more incremental changes.

## **Adaptive Anti-Skating**

The anti-skating philosphy has remained the same. Our correct adaptive anti-skating mechanism adjusts the anti-skating to accurately reflect the force required between the inner and outer grooves of the vinyl record. We have fine tuned the position of the mechanism on the tonearm to make it more accessible and therefore easier to setup.





#### **Sub-Chassis**

**Sub-Chassis** designs are more commonly found in **lightweight turntables**. They are incredibly effective in **isolating the turntable**, especially if it is placed in very close proximity to the speakers.

However there are certain elements of sub-chassis design that lend themselves **exceptionally well to be used** in high-mass turntables.

In the Signature 12, the **tonearm and platter** are mounted on a **TPE decoupled, resonance optimized aluminium alloy sub-chassis**, another step towards separating tonearm and platter from the mass & spring loaded main chassis and the motorblock.

The tonearm is equipped with an easily accessible **5P DIN connector** on the back of the base and remains fully **VTA adjustable** on the fly, just by turning a set screw. Finding the right VTA could not be more intuitive.



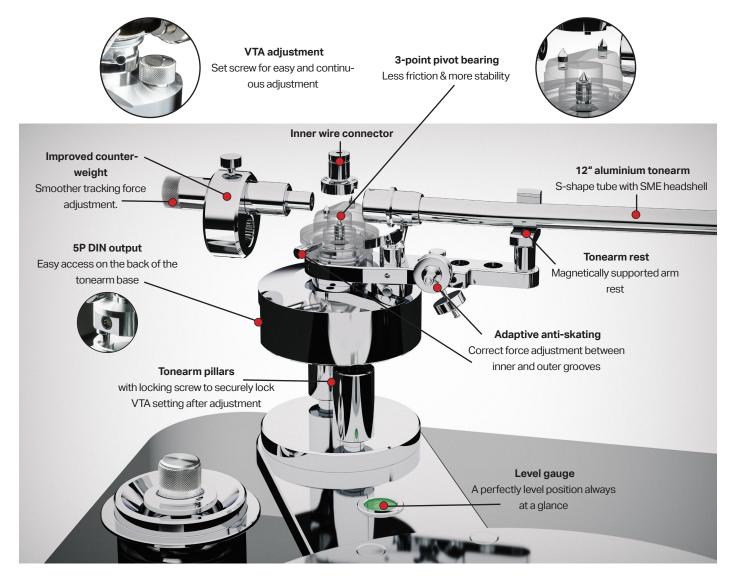


# 3-point pivot tonearm bearing

The most significant change is in the tonearm bearing. We have **redesigned** the tonearm bearing to switch from a uni-pivot to a **3-point pivot system**. The uni-pivot system is an **excellent solution** that is **widely used in high-end** tonearms. However, there are also some disadvantages. They are very **costly to produce** and can often be **difficult to set up**. The entire tonearm **weight is supported by a single pin**, which **exerts significant stress** on it. Therefore, **material selection**, **design**, **and manufacturing** must be carefully considered to ensure the viability of this system.

Our research has demonstrated the effectiveness of cardanic 4-pin point bearings in managing the weight and load of a tonearm. This has led us to experiment with adding a additional pivot points to our uni-pivot design. Precise alignment of the three pivot points results in further reduction of friction and enhanced stability, outperforming cardanic or our previous unipivot bearings. The ability to track the most minute changes in the grooves of your vinyl records and extract the utmost detail has been improved by yet another step.

The new bearing design will also **accommodate heavier high-end MC cartridges** more efficiently than before.





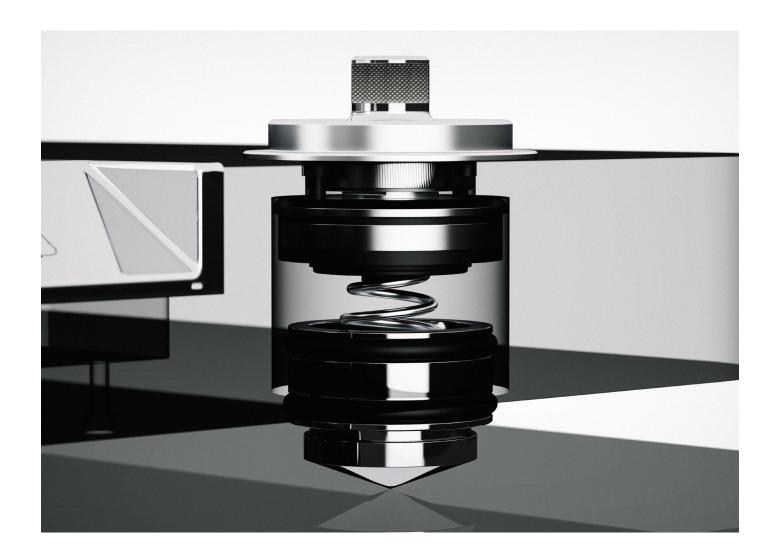
## **Spring loaded feet**

In order to accommodate the **increased total mass** of the Signature 12.2 compared to its predecessor, we have designed completely new **spring-loaded feet**.

In the case of **ultra-high mass**, as seen in the Signature 12.2, our research has shown that the **current magnetic feet are not strong enough**. The new **spring-loaded feet** provide a **superior decoupling effect** for the turntable. Additionally, this enables us to modify the damping characteristics and construct a **mass-loaded sub-chassis**.

The feet use **conical tips** to **redirect any unwanted energy** (vibration, resonances, noise, etc.) away from the turntable. They are easily **adjusted** from the top of the chassis, allowing for a **level position** to be achieved with minimal effort.











## **Electronic Speed Control**

The motor is powered by a precision DC-driven AC generator for playback speeds of 33 and 45 RPM with the utmost precision.

After careful consideration, we have decided to forego the old display in favor of a, elegant control panel crafted, again, from hand-polished aluminum. Displays inherently have the disadvantage of producing unwanted (and unnecessary) electromagnetic radiation. Removing the display is not only a commitment to the analogue and haptic control elements that bring joy to use, but also a commitment to focus solely on audio quality.

## Motor block and Flywheel

The Signature 12.2 uses the same drive principle as before. Its flywheel belt drive system ensures a vibrationfree running which results in the most accurate and stable speeds.

The motors are now mounted in a full aluminum motor block, which further dampens vibrations. Aesthetically, the new motor block adds additional high-gloss polished aluminum accents, enhancing the overall visual appeal of the complete Signature 12.2 package. An elegant and luxurious finishing touch.







### High-end phono cable

Cables are not able to make your sound system sound better, but they ensure that **every detail and information of the signal** is transmitted to the dedicated receiving device.

The included **Connect it Phono DS 5P/RCA** is a high end phono optimized cable. With quality **99.99% OFC copper** conductors and **silver plated connectors** for a lossless signal transmission.

#### **Upgrade to TRUE BALANCED**



Use your Signature 12.2 in balanced configuration with our **Phono Box RS2** to ignite the full potential!

To do so, get your **True Balanced** cable now!

Contact your dealer for more information or go to:

www.project-audio.com/connect-it



\*To use our True Balanced Connection, your Signature 12.2 needs to be equipped with an MC cartridge.

